

Amendments to the Claims:

The listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 to 19 (canceled).

Claim 20 (Currently Amended): A thermo-hydrodynamic force amplifier in which a liquid is displaced between a hot region (14) and a cold region (16) within a rigid cylinder (13) by means of a ~~driven auxiliary~~ drive-actuated displacer piston (11) through conduits of a ~~heater-generator-cooler~~ heater-regenerator-cooler arrangement (14, 15, 16) or of a heater-recuperator-cooler arrangement ~~(14, 15, 16)~~ so that the liquid cyclically contracts and expands, thereby providing output work ~~(19) that~~ which in each cycle is greater than an input work (12) at the ~~auxiliary~~ displacer piston (11), wherein the liquid in the arrangement (14, 15, 16) is cyclically displaced in alternating flow directions in a circuit.

which comprises in its circuit path the arrangement (14, 15, 16)  
and the displacer piston (11) in the rigid cylinder, the liquid  
producing and produces the output work (19) at a separate machine  
(18, 33).

Claim 21 (Currently Amended): The force amplifier as set forth in claim 20, wherein the liquid produces the output work ~~(19)~~ during expansion, being thereby expanded to atmospheric pressure ( $P_0$ ) or to a slightly higher pressure, and ~~that~~ wherein the liquid is then returned to an initial state in the cycle by being caused to contract by a reversible cooling process.

Claim 22 (Previously Presented): The force amplifier as set forth in claim 20, wherein a switchable shut-off element (17) by means of which the pressure generated by the expanding column of liquid may be regulated both in terms of time and quantity.

Claim 23 (Currently Amended): The force amplifier as set forth in claim 20, ~~wherein~~ having a working frequency that is clearly below 1 Hz.

Claim 24 (Currently Amended): The force amplifier as set forth in claim 20, wherein the separate machine (18, 33) is coupled to the output (30) of the force amplifier in such a manner that the linear work production of the cyclically expanding liquid is directly coupled into the separate machine, said separate machine (18, 33) being a linear motion energy converter, ~~more specifically an air compressor, a pressure generator in a reverse osmosis system or the like.~~

Claim 25 (Previously Presented): The force amplifier as set forth in claim 20, wherein the separate machine (18, 33) is coupled to the force amplifier through a force balancer (30) and a pressure coupling (33a) and acts as a refrigerator-heat pump.

Claim 26 (Previously Presented): The force amplifier as set forth in claim 20, wherein the separate machine is a hydraulic engine (18) through which the thermally expanding liquid flows cyclically so that rotational energy (19) is generated at a shaft of the hydraulic engine.

Claim 27 (Previously Presented): The force amplifier as set forth in claim 26, wherein the liquid that cyclically expands and contracts is concurrently used as a hydraulic liquid by the hydraulic engine (18).

Claim 28 (Previously Presented): The force amplifier as set forth in claim 26, wherein an expansion tank (20) that is pressurized to atmospheric pressure ( $P_0$ ) or to a slightly elevated pressure is mounted downstream of the hydraulic engine (18).